

A B S T R A C T

A first substrate (11a) is positioned on a support surface (7) in a vacuum chamber with an upward-facing first bonding surface (12a) spin-coated with adhesive while a second substrate (11b) is held with downward-facing second bonding surface (12b) to a cover (3) by suction. While the vacuum chamber is being evacuated to a pressure of between 0.1mbar and 2mbar, a support pin (9) is extended through central openings (14a, 14b) of the substrates (11a, 11b) and then retracted with the second substrate (11b) released from the cover (3) and carried by radially extended balls (10). The support pin (9) is lowered to a position where the balls (10), acting against the first bonding surface (12a), deform the first substrate (11a). The first bonding surface (12a) being therefore slightly concave, the first and second bonding surfaces (12a, 12b) only touch close to their circumferences. Retraction of the balls (10) causes a spreading of the contact area radially inwards to cover the first and second bonding surfaces (12a, 12b) without entrapment of non-bonded areas. The substrates (11a, 11b) are then lifted by the support pin (9) with again extended balls (10) and pressed against the cover (3) and the vacuum chamber is aired.

(Fig. 2c)